

Appl. No. 10/812,725
Amdt. Dated November 20, 2006
Response to Office action dated August 21, 2006

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REMARKS

Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Claims 1, 3-9, and 11-20 are now pending in this application, with Claims 1, 15, and 20 being the independent claims. Claims 1, 15, and 20 have been amended herein. No new matter is believed to have been added.

Rejections Under 35 U.S.C. § 103

Claims 1 and 10-15 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over U.S. Patent Nos. 2,124,067 (Allen) and 5,783,893 (Dade et al.). These rejections are respectfully traversed.

Independent Claims 1 and 15 now includes recitations that more clearly indicate that each of the stator windings is electrically isolated from each of the armature or rotor windings.

Allen relates to an electrical machine that is configured to simultaneously generate high frequency AC and low voltage DC. To do so, the disclosed machine includes a single rotor having windings thereon, and two stators each having windings thereon. As clearly disclosed in FIG. 10, each of the windings (46) on the inner stator (13), and at least a portion of the windings (49') on the outer stator (14) are electrically coupled to the windings (42) on the rotor (14).

Dade et al. relates to an electrical machine that includes a rotor having two permanent magnet (PM) rotor sections, an inner PM rotor section and an outer PM rotor section, and further includes two stators, an inner stator and an outer stator. The inner and outer PM rotor sections are coupled to a rotationally mounted drive shaft, and the inner and outer stators are fixedly mounted to a housing, and both surround the drive shaft.

Allen clearly fails to disclose or even remotely suggest that each of the windings on the inner and/or the outer stator could or should be electrically isolated from the windings on the rotor. Moreover, Dade et al., either alone or in combination with Allen, fails to teach or suggest including any windings on either of the rotors, let alone windings

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that are electrically coupled to one another and electrically isolated from those on the stators, as is recited in each of independent Claims 1 and 15. Indeed, doing so would render the generator of Allen unsatisfactory for its intended purpose (e.g., supply high frequency AC and low voltage DC), and would completely change its principle of operation.

It is well-settled that if a proposed modification would render the device being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). It is further known that if a proposed modification or combination would change the principle of operation of the device being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) (obviousness cannot be found where the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." Id. at 813, 123 USPQ at 352.).

In view of the above, and because Claims 10-14 depend from Claim 1, reconsideration and withdrawal of the § 102 rejection is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 3, 4, 7-9, 16, 17, 19, and 20 stand rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Allen, Dade et al., and U.S. Patent No. 3,676,764 (Syverson), and Claims 5, 6, and 18 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Allen, Dade et al., Syverson, and U.S. Patent No. 4,647,806 (Giuffrida). These rejections are respectfully traversed.

Independent Claim 20 recites subject matter that is at least commensurate in scope with the above-noted features of independent Claims 1 and 15 that is not disclosed or suggest in Allen or Dade et al., either alone or in combination. Moreover, upon review of both Syverson and Giuffrida, Applicant submits that these references also fail to disclose, or even remotely suggest, at least these features.

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In view of the foregoing, and because dependent Claims 3-9 and 16-19 depend from independent Claims 1 and 15, respectively, reconsideration and withdrawal of the § 103 rejections is requested.

Conclusion

Based on the above, independent Claims 1, 15, and 20 are patentable over the citations of record. The dependent claims are also submitted to be patentable for the reasons given above with respect to the independent claims and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicant submits that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

Dated: November 20, 2006

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